| L Number | Hits | Search Text | DB | Time stamp |
|---|---|---|---|---|
| 1 | 23 | "5631499" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/11/29 11:39 |
| - | 25 | "5298459" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/11/29 11:39 |
| - | 48 | "5376584" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/04 15:07 |
| - | 40 | "5137845" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/04 15:07 |
| - | 3 | "5424581" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/04 15:07 |
| - | 105 | "5298459" "5376584" "5137845" "5424581" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 08:06 |
| - | 1 | 5946590.pn. and ("4" metallurgy) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 09:51 |
| - | 45 | (ubm barrier (under adj bump adj metallurgy)) near3 ((cu near1 (ti ni)) (copper near (titanium nikel))) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 08:52 |
| - | 270620 | (ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 08:52 |
| - | 270006 | (ubm barrier (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:10 |
| - | 47 | ((ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) near3 ((cu near1 (ti ni)) (copper near (titanium nikel))) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 07:47 |
| - | 2 | (((ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))) near3 ((cu near1 (ti ni)) (copper near (titanium nikel)))) not ((ubm barrier (under adj bump adj metallurgy)) near3 ((cu near1 (ti ni)) (copper near (titanium nikel)))) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 08:53 |
| - | 10 | 5384283.URPN. | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 08:56 |
| - | 43 | 4273859.URPN. | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 09:01 |
| - | 32 | 4742023.URPN. | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 09:04 |
| - | 0 | 5946590.pn. and tin | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 09:53 |

| - | 1 | 5719070.pn. and tin | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 09:54 |
|---|---|---|---|---|
| - | 0 | 5946590.pn. and sn | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 09:53 |
| - | 1 | 6030512.pn. and (tin sn) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/01/07 09:54 |
| - | 106 | "5239198" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/05/03 08:32 |
| - | 0 | "5239198" and (hmt (high adj melt$3 adj temperature)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/05/03 08:37 |
| - | 23 | semiconductor and ((solder adj (bump ball)) with (hmt (high adj melt$3 adj temperature))) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/05/03 08:50 |
| - | 6 | ("5459287" \| "5463191" \| "5541368" \| "5587885" \| "5591941" \| "5841198").PN. | USPAT | 2002/05/03 08:52 |
| - | 6 | 5841198.URPN. | USPAT | 2002/05/03 08:54 |
| - | 1 | 6186392.URPN. | USPAT | 2002/05/03 08:56 |
| - | 25 | ("3960279" \| "4004261" \| "4346516" \| "4801065" \| "4830264" \| "4983804" \| "5118027" \| "5299730" \| "5346775" \| "5401911" \| "5447886" \| "5531942" \| "5539153" \| "5620927" \| "5643831" \| "5674785" \| "5739585" \| "5816482" \| "5839641" \| "5841198" \| "5867082" \| "5872400" \| "5899737" \| "5986348" \| "6100175").PN. | USPAT | 2002/05/03 08:57 |
| - | 6 | ("5459287" \| "5463191" \| "5541368" \| "5587885" \| "5591941" \| "5841198").PN. | USPAT | 2002/05/03 09:04 |
| - | 6 | 5841198.URPN. | USPAT | 2002/05/03 09:05 |
| - | 6 | 5841198.URPN. | USPAT | 2002/05/03 09:05 |
| - | 20 | (US-6350669-$ or US-6165885-$ or US-6121069-$ or US-5959355-$ or US-5953623-$ or US-5736074-$ or US-5591941-$ or US-5468995-$ or US-5841198-$ or US-6283358-$ or US-6186392-$ or US-5986348-$ or US-5872400-$ or US-5346775-$ or US-4983804-$ or US-5946590-$ or US-5298459-$ or US-6201679-$ or US-6030512-$ or US-5719070-$).did. | USPAT | 2002/05/03 14:47 |
| - | 7 | ((US-6350669-$ or US-6165885-$ or US-6121069-$ or US-5959355-$ or US-5953623-$ or US-5736074-$ or US-5591941-$ or US-5468995-$ or US-5841198-$ or US-6283358-$ or US-6186392-$ or US-5986348-$ or US-5872400-$ or US-5346775-$ or US-4983804-$ or US-5946590-$ or US-5298459-$ or US-6201679-$ or US-6030512-$ or US-5719070-$).did.) and (pad near3 (cu copper)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/05/03 14:48 |
| - | 50 | ((ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))) near3 ((cu near1 (ti ni)) (copper near (titanium nikel))) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 07:48 |
| - | 100 | (ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) same barrier | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 07:50 |

| - | 178 | (ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:05 |
|---|---|---|---|---|
| - | 0 | 257/772,773,776,779,780 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 07:52 |
| - | 5054 | 257/772 257/773 257/776 257/779 257/780 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 07:53 |
| - | 41 | ((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 07:53 |
| - | 8 | ("4840302" \| "5508229" \| "5547740" \| "5888892" \| "6196443" \| "6251501" \| "6258705" \| "6281106").PN. | USPAT | 2002/06/13 07:57 |
| - | 2 | ("5470787" \| "5872404").PN. | USPAT | 2002/06/13 07:57 |
| - | 1 | 6281106.URPN. | USPAT | 2002/06/13 07:57 |
| - | 7 | 5977632.URPN. | USPAT | 2002/06/13 08:02 |
| - | 2 | 6201305.URPN. | USPAT | 2002/06/13 08:02 |
| - | 2 | ("5327013" \| "5977632").PN. | USPAT | 2002/06/13 08:03 |
| - | 2 | ("5327013" \| "5977632").PN. | USPAT | 2002/06/13 08:03 |
| - | 2 | 6201305.URPN. | USPAT | 2002/06/13 08:03 |
| - | 500 | (ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:06 |
| - | 90 | (257/772 257/773 257/776 257/779 257/780) and ((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:06 |
| - | 49 | ((257/772 257/773 257/776 257/779 257/780) and ((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)))) not (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:18 |
| - | 1 | "5323051".PN. | USPAT | 2002/06/13 08:07 |
| - | 6 | ("5420073" \| "5470787" \| "5767010" \| "5773359" \| "5903058" \| "6107180").PN. | USPAT | 2002/06/13 08:09 |
| - | 0 | 6118180.URPN. | USPAT | 2002/06/13 08:13 |
| - | 3 | ("5162264" \| "5220199" \| "5726501").PN. | USPAT | 2002/06/13 08:13 |
| - | 4 | ("3697828" \| "4710798" \| "5046161" \| "5075965").PN. | USPAT | 2002/06/13 08:15 |
| - | 11 | 5726501.URPN. | USPAT | 2002/06/13 08:16 |
| - | 370 | (257/772 257/773 257/776 257/779 257/780) and (barrier adj layer) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:20 |
| - | 352 | ((257/772 257/773 257/776 257/779 257/780) and (barrier adj layer)) not (((ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))) near3 ((cu near1 (ti ni)) (copper near (titanium nikel))) ) not (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780)) not (((257/772 257/773 257/776 257/779 257/780) and ((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)))) not (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780))) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:20 |

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|---|---|---|---|---|
| - | 15 | ((((257/772 257/773 257/776 257/779 257/780) and (barrier adj layer)) not (((ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))) near3 ((cu near1 (ti ni)) (copper near (titanium nikel))) ) not (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780)) not (((257/772 257/773 257/776 257/779 257/780) and ((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))))) not (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780)))) and (bump ball) and metallurgy | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:27 |
| - | 49 | ((257/772 257/773 257/776 257/779 257/780) and (barrier adj layer)) and metallurgy | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:22 |
| - | 8 | ("4840302" \| "5508229" \| "5547740" \| "5888892" \| "6196443" \| "6251501" \| "6258705" \| "6281106").PN. | USPAT | 2002/06/13 08:23 |
| - | 762 | (solder adj (bump ball)) and metallurgy | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:28 |
| - | 2 | ((solder adj (bump ball)) and metallurgy) and (barrier with (groove protrusion projection ridge)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:29 |
| - | 6 | ((solder adj (bump ball)) and metallurgy) and (barrier with (groove recess protrusion projection ridge)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:29 |
| - | 266 | ((solder adj (bump ball)) and metallurgy) and barrier | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:30 |
| - | 173 | (((ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))) near3 ((cu near1 (ti ni)) (copper near (titanium nikel))) ) (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780)) (((257/772 257/773 257/776 257/779 257/780) and ((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)))) not (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780))) (((257/772 257/773 257/776 257/779 257/780) and (barrier adj layer)) and metallurgy) | USPAT; US-PGPUB; EPO; DERWENT | 2002/06/13 08:30 |

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|---|---|---|---|---|
| – | 219 | (((solder adj (bump ball)) and metallurgy) and barrier) not (((((ubm barrier blm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy))) near3 ((cu near1 (ti ni)) (copper near (titanium nikel))) ) (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780)) (((257/772 257/773 257/776 257/779 257/780) and ((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)))) not (((ubm (ball adj limiting adj metallurgy) (under adj bump adj metallurgy)) and barrier) and (257/772 257/773 257/776 257/779 257/780))) (((257/772 257/773 257/776 257/779 257/780) and (barrier adj layer)) and metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:31 |
| – | 10 | ("4495222" \| "4761386" \| "4933305" \| "5130779" \| "5284797" \| "5350488" \| "5384284" \| "5403777" \| "5567654" \| "6133136").PN. | USPAT | 2002/06/13 08:35 |
| – | 5 | ("4434434" \| "5268072" \| "5629564" \| "5785236" \| "5795819").PN. | USPAT | 2002/06/13 08:36 |
| – | 15 | 4761386.URPN. | USPAT | 2002/06/13 08:38 |
| – | 5 | ("3806361" \| "4106051" \| "4109275" \| "4149301" \| "4628590").PN. | USPAT | 2002/06/13 08:40 |
| – | 0 | 6333559.URPN. | USPAT | 2002/06/13 08:40 |
| – | 10 | 5384283.URPN. | USPAT | 2002/06/13 08:46 |
| – | 8 | "5872399" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/06/13 08:53 |
| – | 5 | ("5504277" \| "5521435" \| "5557844" \| "5668405" \| "5669783").PN. | USPAT | 2002/06/13 08:55 |
| – | 543 | (ubm (underbump near metallization)(ball near1 metallurgy) (under adj bump adj metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:11 |
| – | 387 | ((ubm (underbump near metallization)(ball near1 metallurgy) (under adj bump adj metallurgy))) and (ti titanium chrom cr nickel ni gold au copper cu) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/12 10:46 |
| – | 118 | (((ubm (underbump near metallization)(ball near1 metallurgy) (under adj bump adj metallurgy))) and (ti titanium chrom cr nickel ni gold au copper cu)) and (ti titanium) and (nickel ni) and (gold au) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/12 10:48 |
| – | 26 | (((ubm (underbump near metallization)(ball near1 metallurgy) (under adj bump adj metallurgy))) and (ti titanium) and (nickel ni) and (gold au)) and (angstroms micrometer) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/12 10:49 |
| – | 118 | ((ubm (underbump near metallization)(ball near1 metallurgy) (under adj bump adj metallurgy))) and (ti titanium) and (nickel ni) and (gold au) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:16 |
| – | 0 | 6489229.URPN. | USPAT | 2003/03/12 12:09 |
| – | 10 | ("3458925" \| "4434434" \| "4516525" \| "4622205" \| "4646958" \| "5137845" \| "5470787" \| "6107180" \| "6184061" \| "6417089").PN. | USPAT | 2003/03/12 12:09 |
| – | 4 | ("5349500" \| "5902686" \| "6251766" \| "6258703").PN. | USPAT | 2003/03/12 13:47 |
| – | 10 | ("3663184" \| "4661375" \| "5162257" \| "5376584" \| "5480835" \| "5492235" \| "5736456" \| "5767010" \| "5773359" \| "6133136").PN. | USPAT | 2003/03/12 13:48 |
| – | 27 | ((ubm (underbump near metallization)(ball near1 metallurgy) (under adj bump adj metallurgy))) with (ti titanium) with (nickel ni) with (gold au) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/12 16:13 |

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|---|---|---|---|---|
| – | 2 | 6348399.URPN. | USPAT | 2003/03/12 16:18 |
| – | 2 | 6348399.URPN. | USPAT | 2003/03/12 16:19 |
| – | 9 | ("5323051" \| "5620928" \| "5656550" \| "5830800" \| "5925936" \| "5930603" \| "6004867" \| "6204559" \| "6238952").PN. | USPAT | 2003/03/12 16:19 |
| – | 2 | 6348399.URPN. | USPAT | 2003/03/13 07:58 |
| – | 9 | ("5323051" \| "5620928" \| "5656550" \| "5830800" \| "5925936" \| "5930603" \| "6004867" \| "6204559" \| "6238952").PN. | USPAT | 2003/03/13 07:59 |
| – | 2617 | (ubm (underbump near1 metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 08:45 |
| – | 28 | ((ubm (underbump near1 metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) with (ti titanium) with (nickel ni) with (gold au) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 10:20 |
| – | 0 | 6179200.URPN. | USPAT | 2003/03/13 08:23 |
| – | 7 | ("5493075" \| "5535936" \| "5607099" \| "5658827" \| "5775569" \| "5791552" \| "5825629").PN. | USPAT | 2003/03/13 08:23 |
| – | 26 | "5298459" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:33 |
| – | 28 | "5268072" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:34 |
| – | 61 | ("5298459" "5268072") not6 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:34 |
| – | 48 | ("5298459" "5268072") not (((ubm (underbump near1 metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) with (ti titanium) with (nickel ni) with (gold au)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:34 |
| – | 48 | "5298459" "5268072" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 08:35 |
| – | 15 | ("5298459" "5268072") and (ti titanium) and (nickel ni) and (gold au) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 09:02 |
| – | 18 | ("4582745" \| "5137845" \| "5268072" \| "5418186" \| "5445705" \| "5456788" \| "5462638" \| "5543032" \| "5629564" \| "5705428" \| "5767010" \| "5775569" \| "5902686" \| "5937320" \| "5946590" \| "6015505" \| "6025649" \| "6130170").PN. | USPAT | 2003/03/13 08:36 |
| – | 3 | "6387793" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 09:02 |
| – | 10 | ("3663184" \| "4661375" \| "5162257" \| "5376584" \| "5480835" \| "5492235" \| "5736456" \| "5767010" \| "5773359" \| "6133136").PN. | USPAT | 2003/03/13 09:02 |
| – | 30 | 3663184.URPN. | USPAT | 2003/03/13 09:49 |
| – | 13 | 4514751.URPN. | USPAT | 2003/03/13 09:50 |
| – | 7 | ("3037180" \| "3141226" \| "3287612" \| "3361592" \| "3395993" \| "3409809" \| "3480412").PN. | USPAT | 2003/03/13 09:55 |
| – | 83 | ((ubm (underbump near1 metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) and ((ti titanium) with (nickel ni) with (gold au)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 10:21 |

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|---|---|---|---|---|
| - | 55 | (((ubm (underbump near1 metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) and ((ti titanium) with (nickel ni) with (gold au))) not (((ubm (underbump near1 metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) with (ti titanium) with (nickel ni) with (gold au)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 12:33 |
| - | 0 | 6333559.URPN. | USPAT | 2003/03/13 14:50 |
| - | 10 | ("4495222" \| "4761386" \| "4933305" \| "5130779" \| "5284797" \| "5350488" \| "5384284" \| "5403777" \| "5567654" \| "6133136").PN. | USPAT | 2003/03/13 14:50 |
| - | 8 | "6187680" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/13 15:24 |
| - | 4 | ("5136364" \| "6107170" \| "6133136" \| "6187680" \| "2002/0003302").PN. | USPAT | 2003/03/13 15:24 |
| - | 21 | 5136364.URPN. | USPAT | 2003/03/13 15:28 |
| - | 4 | ("5136364" \| "6107170" \| "6133136" \| "6187680" \| "2002/0003302").PN. | USPAT | 2003/03/13 15:32 |
| - | 5 | 6187680.URPN. | USPAT | 2003/03/13 16:19 |
| - | 9 | ("4495222" \| "4761386" \| "4933305" \| "5284797" \| "5350488" \| "5384284" \| "5403777" \| "5416278" \| "5567654").PN. | USPAT | 2003/03/13 16:19 |
| - | 2617 | (ubm (underbump near metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:49 |
| - | 70 | al adj stack | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 08:49 |
| - | 0 | ((ubm (underbump near metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) with (al adj stack) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 08:49 |
| - | 873 | al near2 stack | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 08:49 |
| - | 0 | ((ubm (underbump near metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) with (al near2 stack) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 08:49 |
| - | 4 | ((ubm (underbump near metallization) blm plm ((ball pad) near1 metallurgy) (under adj bump adj metallurgy))) and (al near2 stack) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:02 |
| - | 5 | 6187680.URPN. | USPAT | 2003/03/14 08:53 |
| - | 6257 | plated near1 through near1 hole | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:03 |
| - | 0 | (plated near1 through near1 hole) and ((embedding embedded) with (screen adj printing)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:03 |
| - | 138 | (embedding embedded) with (screen adj printing) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:11 |
| - | 0 | ((embedding embedded) with (screen adj printing)) with "or" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:06 |
| - | 0 | ((embedding embedded) with (screen adj printing)) with cvd | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:11 |

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|---|---|---|---|---|
| – | 0 | (plated near1 through near1 hole) with cvd | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:11 |
| – | 0 | 6451681.URPN. | USPAT | 2003/03/14 09:16 |
| – | 6 | ("5134460" \| "5731624" \| "5795819" \| "5864946" \| "6133136" \| "6187680").PN. | USPAT | 2003/03/14 09:16 |
| – | 19 | ("4237606" \| "5244833" \| "5293025" \| "5302219" \| "5442852" \| "5611884" \| "5637832" \| "5658827" \| "5691245" \| "5744758" \| "5817404" \| "5902686" \| "5925930" \| "6107180" \| "6143116" \| "6181569" \| "6187680" \| "6192579" \| "6341417").PN. | USPAT | 2003/03/14 09:19 |
| – | 13 | 5902686.URPN. | USPAT | 2003/03/14 09:28 |
| – | 3 | 6258705.URPN. | USPAT | 2003/03/14 09:31 |
| – | 10 | ("4927505" \| "5137845" \| "5369299" \| "5563102" \| "5736456" \| "5773359" \| "5902686" \| "5903058" \| "5904859" \| "6015652").PN. | USPAT | 2003/03/14 09:32 |
| – | 6 | 5904859.URPN. | USPAT | 2003/03/14 09:35 |
| – | 3 | ("5773359" \| "5904859" \| "5985694").PN. | USPAT | 2003/03/14 09:38 |
| – | 3 | ("5773359" \| "5904859" \| "5985694").PN. | USPAT | 2003/03/14 09:39 |
| – | 5 | ("3809588" \| "4396900" \| "4434434" \| "4747907" \| "5503286").PN. | USPAT | 2003/03/14 09:39 |
| – | 18 | ("3887760" \| "4921157" \| "4950623" \| "5048744" \| "5152451" \| "5160409" \| "5162257" \| "5167361" \| "5293006" \| "5327013" \| "5407121" \| "5415944" \| "5470787" \| "5499754" \| "5617989" \| "5629564" \| "5641113" \| "5767010").PN. | USPAT | 2003/03/14 09:41 |
| – | 501 | (ubm (under near1 bump near1 metallurgy)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:50 |
| – | 50 | ((ubm (under near1 bump near1 metallurgy))) near3 (titanium chrome nickel platinum) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:51 |
| – | 102 | ((ubm (under near1 bump near1 metallurgy))) with (titanium chrome nickel platinum) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 09:51 |
| – | 5 | ("5894410" \| "5990547" \| "6169329" \| "6175160" \| "6413851").PN. | USPAT | 2003/03/14 13:43 |
| – | 0 | 6501185.URPN. | USPAT | 2003/03/14 13:43 |
| – | 32 | "5767010" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 16:12 |
| – | 1 | 5767010.pn. and "42" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 16:14 |
| – | 1 | 5767010.pn. and (tin lead) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/03/14 16:14 |
| – | 2 | "6319846" | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/07/14 09:27 |
| – | 0 | 6319846.URPN. | USPAT | 2003/07/14 09:27 |
| – | 5 | ("4130454" \| "5244539" \| "5268048" \| "5574386" \| "6134776").PN. | USPAT | 2003/07/14 09:27 |
| – | 9 | ("4495222" \| "4761386" \| "4933305" \| "5284797" \| "5350488" \| "5384284" \| "5403777" \| "5416278" \| "5567654").PN. | USPAT | 2003/07/14 09:33 |
| – | 9 | ("4495222" \| "4761386" \| "4933305" \| "5284797" \| "5350488" \| "5384284" \| "5403777" \| "5416278" \| "5567654").PN. | USPAT | 2003/07/14 09:36 |